## The Belfry

Outfitting a Control Room for MINOS in Wilson Hall 12 NW

# Computing Hardware

- Option 1 The Works
  - Computers
    - DCS: UMD will provide Windows machine \$0
    - Beam, CRL, Run control: 3 Dell Optiplex @ \$1,167 = \$3,501
    - Online Monitoring: 2 Dell Dimensions @ \$2,036 = \$4,072
  - Screens
    - 12 flat screens @ \$456 = \$5,472
  - Total
    - Computers: \$7,503
    - Screens: \$5,472
    - Total: \$12,975

# Computing Hardware

#### Where we can scale down

- Eliminate the FD OM machine and run a GUI interface to the machine at Soudan. The feasibility of this depends on the network response. Savings = \$2,036.
- Eliminate CRL Station. Savings = \$1,653.
- ND and FD run control GUIs on the same screen. Savings = \$456.
- ND and FD DCS on the same screen. Savings = \$456.
- Replace some or all flat screens with CRTs @ \$244. Savings =
  \$212 per screen.
- Bargain basement cost is \$6324.

### Furniture

### Computing Desks

- Needed for ergonomic considerations
- Assume 4 desks (a) \$188 = \$752

#### Chairs

- Control Room: 5 @ \$203 = \$1,015
- Conference Room: 5 @ \$203 = \$1,015
- Could scale back the control room chairs to \$88 models but we are asking people to spend a whole shift sitting in them.

#### Tables

- Control room: 36" round table = \$307.
- Conference room: 83" oval table = \$400.

### Furniture

#### Phones

- control room: 3 speaker phones @ \$120 = \$360
- conference room phone = \$400. (Could replace with fourth speaker phone; savings = \$280).
- Assume the following is available from surplus:
  - Desks
  - File cabinets
  - Bookshelves
  - Could get lucky and find suitable chairs, computer tables, etc, but these figures don't assume it.
- Depending on what we have to buy, potential furniture costs = \$4249.

## Staged Implementation

### This plan costs

- From \$9,718 (bargain basement computing, cheap chairs, and no conference phone)
- To \$17,294 (the works).
- But we don't need it all at once.
  - Could we buy it on the "stone soup" plan, i.e., get just what we need now and hope for more money later?
  - Delay beam monitor screens and computer until FY04 (\$2991).
  - Delay ND OM and screens until FY05 (\$3860).